

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

NPN	PNP
2N6551	2N6554
2N6552	2N6555
2N6553	2N6556

COMPLEMENTARY SILICON TRANSISTOR

JEDEC TO-202 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6551 series and 2N6554 series types are Complementary Silicon Transistors manufactured by the epitaxial planar process designed for general purpose audio amplifier applications.

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

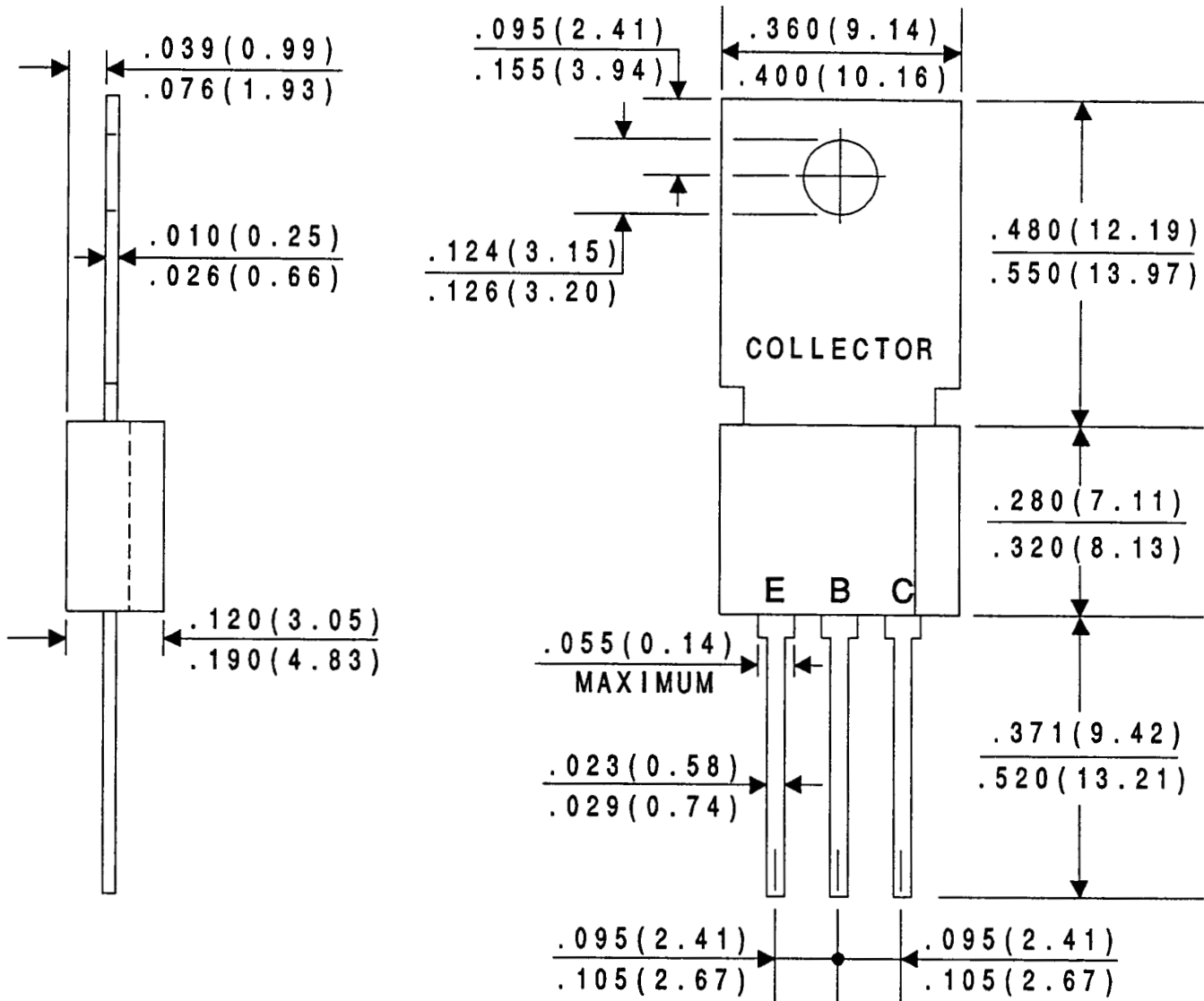
	SYMBOL	2N6551 2N6554	2N6552 2N6555	2N6553 2N6556	UNITS
Collector-Base Voltage	V_{CB0}	60	80	100	V
Collector-Emitter Voltage	V_{CE0}	60	80	100	V
Emitter-Base Voltage	V_{EBO}		5.0		V
Collector Current	I_C		1.0		A
Peak Collector Current	I_{CM}		2.0		A
Base Current	I_B		100		mA
Power Dissipation	P_D		2.0		W
Power Dissipation ($T_C = 25^\circ\text{C}$)	P_D		10		W
Operating and Storage					
Junction Temperature	T_J, T_{stg}		-65 to +150		$^\circ\text{C}$
Thermal Resistance	θ_{JA}		62.5		$^\circ\text{C/W}$
Thermal Resistance	θ_{JC}		12.5		$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N6551 2N6554		2N6552 2N6555		2N6553 2N6556		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I_{CBO}	$V_{CB} = 40\text{V}$		100		-		-	nA
I_{CBO}	$V_{CB} = 60\text{V}$		-		100		-	nA
I_{CBO}	$V_{CB} = 80\text{V}$		-		-		100	nA
I_{EBO}	$V_{BE} = 4.0\text{V}$		100		100		100	nA
BV_{CE0}	$I_C = 1.0\text{mA}$	60		80		100		V
BV_{CB0}	$I_C = 100\mu\text{A}$	60		80		100		V
BV_{EBO}	$I_E = 100\mu\text{A}$	5.0		5.0		5.0		V
$V_{CE(SAT)}$	$I_C = 250\text{mA}, I_B = 10\text{mA}$		0.5		0.5		0.5	V
$V_{CE(SAT)}$	$I_C = 1.0\text{A}, I_B = 100\text{mA}$		1.0		1.0		1.0	V
$V_{BE(ON)}$	$V_{CE} = 5.0\text{V}, I_C = 250\text{mA}$		1.2		1.2		1.2	V
h_{FE}	$V_{CE} = 1.0\text{V}, I_C = 10\text{mA}$	60		60		60		
h_{FE}	$V_{CE} = 1.0\text{V}, I_C = 50\text{mA}$	80	300	80	300	80	300	
h_{FE}	$V_{CE} = 1.0\text{V}, I_C = 250\text{mA}$	60		60		60		
h_{FE}	$V_{CE} = 1.0\text{V}, I_C = 500\text{mA}$	25		25		25		
f_T	$V_{CE} = 5.0\text{V}, I_C = 100\text{mA}, f = 20\text{MHz}$	75	375	75	375	75	375	MHz
C_{ob}	$V_{CB} = 20\text{V}, I_E = 0, f = 1.0\text{MHz}$		18		18		18	pF

(OVER)

JEDEC TO-202 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).